

03050112-060

(North Santee River/South Santee River)

General Description

Watershed 03050112-060 is located in Charleston County and consists primarily of the *South Santee River and the North Santee River* and their tributaries. The watershed occupies 79,763 acres of the Coastal Zone region of South Carolina. The predominant soil types consist of an association of the Bohicket-Capers-Chipley series. The erodibility of the soil (K) averages 0.19; the slope of the terrain averages 1%, with a range of 0-2%. Land use/land cover in the watershed includes: 38.3% forested land, 36.6% nonforested wetland, 11.3% water, 8.4% scrub/shrub land, 5.0% forested wetland, 0.3% barren land, and 0.1% agricultural land.

The lower Santee River divides into the South Santee River and the North Santee River, both draining into the Atlantic Ocean. Both the South and North Santee Rivers are classified FW from their origin to the U.S. Hwy. 17 crossing, SA from the U.S. Hwy. 17 crossing to 1000 feet below the Atlantic Intracoastal Waterway (AIWW) crossing, and ORW from 1000 feet below the AIWW crossing to the Atlantic Ocean. There are a total of 54.6 stream miles in this watershed, along with 657.1 acres of lake waters and 5,266.6 acres of estuarine areas. The South Santee River accepts drainage from Chicken Creek, Hampton Creek, Montgomery Creek, Garfish Creek, Sixmile Creek, and Collins Creek. Pleasant Creek connects Sixmile Creek to the South Santee River. The Fourmile Creek Canal and Alligator Creek also drain into the South Santee River. Sall Creek drains directly into the AIWW, which bisects the South and North Santee Rivers. This section of the AIWW is classified SFH.

The North Santee River accepts drainage from Cedar Creek, Pole Branch, Bonny Clabber Creek, White Oak Creek, and Sixmile Creek. Minim Creek drains into the North Santee River and into the North Santee Bay, and incorporates the drainage of Kinloch Creek (Bluff Creek), Pleasant Meadow Creek, Bella Creek, and Cork Creek. Atchison Creek and Fourmile Creek Canal drain directly into the river, and Little Duck Creek, Duck Creek, Big Duck Creek, Mosquito Creek, and Beach Creek drain into the North Santee Bay. Cane Creek connects the North Santee River to the North Santee Bay and Bird Bank Creek enters the river just before it flows into the Atlantic Ocean.

Additional natural resources in the watershed include the Francis Marion National Forest (covering the southeastern portion of the watershed), several wildlife management areas, the Yawkey Center, Hampton Plantation State Park, and numerous historic structures.

Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
ST-005	S	FW/SA	NORTH SANTEE RIVER AT US 17
ST-006	P	FW/SA	SOUTH SANTEE RIVER AT US 17

North Santee River (ST-005) - Aquatic life is fully supported. This site is located in a transition area between fresh and salt waters and shows characteristics of both. Significant decreasing trends in

five-day biochemical oxygen demand and turbidity suggest improving conditions for these parameters. Recreational uses are fully supported.

South Santee River (ST-006) - Aquatic life use is fully supported. This site is located in a transition area between fresh and salt waters and shows characteristics of both. Although there were violations of the Class FW chromium standards, they did not constitute violations of the Class SA standards. There is a significant decreasing trend in dissolved oxygen concentration. A high concentration of zinc was detected in the 1995 sediment sample. Significant decreasing trends in five-day biochemical oxygen demand, total nitrogen concentrations, and turbidity suggest improving conditions for these parameters. Recreational uses are fully supported.

A fish consumption advisory has been issued by the Department for mercury and includes the North and South Santee Rivers within this watershed (see advisory p.34).

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD) COMMENT</i>	<i>NPDES# TYPE LIMITATION (EL/WQL)</i>
NORTH SANTEE RIVER GCW&SA NORTH SANTEE WWTP PIPE #: 001 FLOW: 0.052	SC0042439 MINOR DOMESTIC EFFLUENT
NORTH SANTEE RIVER SCPSA/WINYAH STEAM PIPE #: 001 FLOW: 5.76 (PROPOSED)	SC0022471 MAJOR INDUSTRIAL EFFLUENT

Growth Potential

There is a low potential for growth in this watershed.